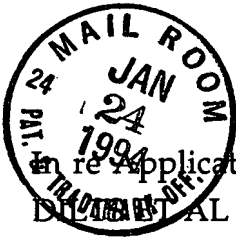


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



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APPLICATION DIVISION

In re Application of:  
DIGITAL

Serial No.: 08/108,877

Filed: 26 OCTOBER 1993

Group Art Unit: Unassigned

Examiner: Unknown

Attorney Docket: P-067

For: OBJECT-ORIENTED TELEPHONY SYSTEM

INFORMATION DISCLOSURE STATEMENT

UNDER 37 C.F.R. §§ 1.97 AND 1.98

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner of Patents and Trademarks, Washington D.C. 20231 on 1/20/94 1994

Signature Judy Morrow  
Date of Signature: \_\_\_\_\_ 1994

Honorable Commissioner of  
Patents and Trademarks  
Washington, DC 20231

Dear Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the references listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed references are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R. § 1.97(g), this Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other possibly material information as defined in 37 C.F.R. § 1.56(a) exists. In accordance with 37 C.F.R. § 1.97(h), this Information Disclosure Statement is not to be construed as an admission that the information cited herein is, or is considered to be, material to the patentability of the claimed subject matter.

Comments regarding the enclosed references are included. These comments are offered as an aid to the Examiner. Such comments, however, are not intended to take the place of the Examiner's complete consideration of each listed reference. The Examiner is requested to consider each reference to the full extent that it may be material to the present application.

The following references are enclosed for the Examiner's consideration:

<u>Patent or Appln. No.</u>	<u>Date</u>	<u>Country</u>
5,181,162	1/19/93	United States
5,151,987	9/29/92	United States
5,136,705	8/04/92	United States
5,133,075	7/21/92	United States
5,125,091	6/23/92	United States
5,093,914	3/03/92	United States
5,075,848	12/24/91	United States
5,060,276	10/22/91	United States
5,050,090	9/17/91	United States
5,041,992	8/20/91	United States
4,953,080	8/28/90	United States
4,891,630	1/02/90	United States
4,885,717	12/05/89	United States
4,821,220	4/11/89	United States
5,119,475	6/02/92	United States

U.S. Patent No. 5,181,162, issued to Smith et al., discloses an object-oriented document management and production system in which documents are represented as collections of logical components, or "objects," that may be combined and physically mapped onto a page-by-page layout. Stored objects are organized, accessed and manipulated through a database management system. At a minimum, objects contain basic information-bearing constituents such as text, image, voice or graphics. Objects may also contain further data specifying appearance characteristics, relationships to other objects, and access restrictions.

U.S. Patent No. 5,151,987, issued to Abraham et al., is directed to systems and methods for recovering from unplanned failures in object oriented computing

environments. The systems and methods recover from unplanned failures in an efficient manner by storing recovery information in recovery objects. During recovery operations from an unplanned failure, object instance methods (which were abnormally terminated by the unplanned failure) use the recovery information to identify committable actions which were executed prior to the unplanned failure. The object instance methods then execute committable actions which were not executed prior to the unplanned failure. Thus, the committable actions which were executed prior to the unplanned failure are not reexecuted, and the committable actions which were not executed prior to the unplanned failure are executed.

U.S. Patent No. 5,136,705, issued to Stubbs et al., discloses computer-controlled test and measurement systems, including resources having multiple states and resources having multiple inputs, and are modeled as data flow diagrams of topologically interconnected resources. A set of "tasks" are defined for changing the states of multiple-state resources and causing software resources to produce output data. Methods and apparatus, including internal and external task ordering rules, are provided to automatically interleave such tasks and implement input-ordering restrictions. Thereby, a sequence of tasks is produced to control the system so as to assure valid data collection and protect physical resources from abuse. Data structures are illustrated for implementing the invention in an object-oriented programming environment.

U.S. Patent No. 5,133,075, issued to Risch, discloses a method for monitoring objects in an interactive object-oriented database system. Any of a plurality of client programs can request monitoring of attributes of objects in the database. A record is kept of update transactions initiated by a client. When the client commits the changes, any client which has requested monitoring is notified of any change in the value of an attribute being monitored at the request of that client. The notification interrupts the client and invokes a predesignated client procedure. Overhead is minimized by creating partial view materialization paths and defining monitors ahead of time and by localizing the monitoring.

U.S. Patent No. 5,125,091, issued to Staas, Jr. et al., discloses a method of controlling processing in a computer, particularly real-time processing. The method is performed using computer data objects. Real-time or other input data received from data sources is classified according to pre-stored control data. The control data defines which data source provides the real-time data, how the real-time data is to be processed, where the real-time data is to be stored and what reports the real-time data will be used

in. The classified real-time data becomes a computer data object with its associated control data and all subsequent processing is performed on the computer data object.

U.S. Patent No. 5,093,914, issued to Coplien et al., discloses a method used by a digital computer in controlling execution of an object-oriented program to effect a defined action, e.g., stopping the program, when a specified virtual function is invoked on a specified object during execution of the program. A breakpoint address is determined at run time, advantageously after the specified object is created in accordance with execution of the program. The breakpoint address determination is not based solely on symbol table, pre-execution, information, but in addition on information generated in conjunction with the creation of the specified object. The breakpoint is inserted while program execution is stopped at an intermediate program point after the specified object is created. After program execution is resumed and the specified virtual function is invoked in accordance with the program, the breakpoint fires. However, the defined action is performed only in response to determining that the firing occurred on the specified object.

U.S. Patent No. 5,075,848, issued to Lai et al., discloses an object-oriented computer architecture in which access descriptors include an object index for selecting an object in the address space, and a rights field specifying the permissible operations on a bi-paged object selected by the access descriptor. A local object lifetime bit is provided in the encoded fields portion of access descriptors, object descriptors, and page table entries to determine the lifetime of an object. The AD lifetime bit in the encoded fields of AD is compared in OTE Lifetime Check Logic with the destination object lifetime, the OTE local bit in the encoded fields of the OTE access descriptor. The OTE local bit in the encoded fields of the OTE is compared in PDTE Lifetime Check Logic with the destination object lifetime, the PDTE local bit in the encoded fields of the PDTE access descriptor. The PDTE local bit in the encoded fields of the PDTE is compared in PTE Lifetime Check Logic with the destination object lifetime, the PTE local bit in the encoded fields of the PTE access descriptor. If any of these checks fails, a protection lifetime fault is asserted.

U.S. Patent No. 5,060,276, issued to Morris et al., discloses a technique in the form of an exemplary computer vision system for detecting the orientation of text or features on an object of manufacture. An image of the features or text is used to extract lines using horizontal bitmap sums, and then individual symbols using vertical bitmap sums, using thresholds with each of the sums. The separated symbols are then appropriately trimmed and sealed to provide individual normalized symbols. A

Decision Module comprising a Feed-Forward Neural network and a sequential decision arrangement determines the "up," "down" or "intermediate" orientation of the text after a variable number of symbols have been processed. The system can then compare the determined orientation with a database to further determine if the object is in the "right-side up," "upside down" or "intermediate" orientation.

U.S. Patent No. 5,050,090, issued to Golub et al., discloses an object placement method and apparatus which obtains efficiency and optimized placement by providing a library of object placement patterns, each pattern in said library representing a plurality of objects filling a pattern line or series of pattern lines of a three-dimensional space. For each pattern line, a first type object (for example, a first size object) to be placed is selected and the pattern which minimizes the portion of the three-dimensional space used to place a number of first type objects, subject to at least one constraint factor, is determined. A representation of the objects in the rows according to the determined pattern may be provided. Linking restrictions between the objects of differing sizes may be provided. The linking restrictions are patterns from the library which may not be employed with objects of differing types in a line of the three-dimensional space. The linking restrictions may reject patterns that lead to irregular pattern geometries, inefficient use of space, unstable characteristics or any other undesirable configuration of the two object types in a single pattern line. The element placement technique determines the patterns which minimize the portions of the three-dimensional space used to place the objects consistent with at least one constraint factor without violating the linking restrictions.

U.S. Patent No. 5,041,992, issued to Cunningham et al., discloses a system and method for interactive design of user manipulable graphic elements. A computer has display and stored tasks wherein the appearance of graphic elements and methods for their manipulation are defined. Each graphic element is defined by at least one figure specification, one mask specification and one map specification. An interactive display editor program defines specifications of said graphic elements. An interactive program editor program defines programming data and methods associated with said graphic elements. A display program uses the figure, map and mask specifications for assembling graphic elements upon the display and enabling user manipulation of said graphic elements.

U.S. Patent No. 4,953,080, issued to Dysart et al., discloses a computer having a file management system. The file management system includes a plurality of application programs, a plurality of data files, a plurality of class data structures and a

plurality of object data structures. Each class data structure includes a reference to an application program within the plurality of application programs. Each object data structure includes a reference to a class data structure from the plurality of class data structures and a reference to at least one data file from the plurality of data files. The use of object data structures adds a layer between a user of the computer and data files. This allows for the computer to refer to an object data structure and associated access files using a tag which is inaccessible to the user. The user refers to an object based on the physical location of the object on the screen. The user may also give the object data structure a name, which is wholly unconnected to the value of the tag. This allows a user to, for instance, give two objects in the same directory the same name. Additionally, the file management system includes a plurality of link data structures, each link data structure including a reference to a first object data structure in the plurality of object data structures which serves a parent object of the link, and including a reference to a second object data structure in the plurality of object data structures which serves as a child object of the link. Child objects and parent objects are not necessarily the same for each link data structure.

U.S. Patent No. 4,891,630, issued to Friedman et al., discloses a system for computer vision which is based upon an image sensor that maps an image to memory cells in association with a computer. An object orientation and position patch is attached to an object to be observed comprising a planar substantially coplanar and non-collinear reflective locations positioned upon the patch and a reflector having the reflective properties of the surface of a regular curved surface intersecting the planar surface. The computer has a task stored in main memory for detecting and quantifying a change in orientation and position of the object from the location of the image of the orientation and position patch.

U.S. Patent No. 4,885,717, issued to Beck et al., discloses a "diagramming debugger" which creates a graphical representation of the sequence of messages sent during operation of an object-oriented program. When one object transmits a message to another object, the diagramming debugger displays representations of the transmitting and receiving objects on a computer screen, each representation comprising a box with labels identifying the represented object. The box representing a sending object includes therewithin a symbol (comprising, for example, one or more characters) identifying the method that sent the message, while the box representing

the receiving object includes therewithin a symbol identifying the method invoked by the message. The message is represented by an arrow pointing from the symbol identifying the sending method to the symbol identifying the invoked method.

U.S. Patent No. 4,821,220, issued to Duisberg, discloses a system for animating program operation and displaying time-based relationships. In a computerized simulation system, the behavior of a model comprising a group of interrelated objects in an object oriented programming environment is defined by a constraint network including temporal constraints, which the future behavior of the model must satisfy following triggering events. Following a triggering event, time stamped representations of messages are created and stored in a queue. The value of a time variable representing time is progressively incremented and the message indicated by each enqueued representation is sent to the model as the value of the time variable surpasses the value of the time stamp of the representation. The message representations and the value of their time stamps are created according to the requirements of the constraint network such that the messages cause the model to perform the appropriate actions at the appropriate times in order to satisfy the temporal constraints defined by the constraint network.

U.S. Patent No. 5,119,475, issued to Smith, et al. discloses a declarative object-oriented approach to menu construction, which provides a mechanism for specifying the behavior, appearance and function of menus as part of an interactive user interface. Menus are constructed from interchangeable object building blocks, without the need to write new code or code and maintaining a coherent interface standard. This approach is implemented by dissecting interface menu behavior into modularized objects specifying orthogonal components of desirable menu behaviors. Once primary characteristics are identified, individual objects are constructed to provide specific alternatives for the behavior within the definitions of each dimension. Specific objects from each dimension are combined to construct a menu having the desired selections of menu behaviors.

This Information Disclosure Statement is filed before the first Office Action has been received and it is believed no fees are due. In the event any fees are due in connection with the submission of this Information Disclosure Statement the Commissioner is authorized to charge Deposit Account 20-0065.

Date: Jan. 18, 1994

Respectfully submitted,  
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